Voluntary Remediation Program (VRP) | (307) 777-7752 | http://deq.state.wy.us/volremedi/index.asp

Remedy Selection



In its 2000 session, the Wyoming Legislature created new opportunities, procedures, and standards for voluntary remediation of contaminated sites. These provisions, enacted as Articles 16, 17, and 18 of the Wyoming Environmental Quality Act and implemented by the Wyoming Department of Environmental Quality (DEQ), will govern future environmental cleanups in Wyoming.

This Fact Sheet summarizes the process of selecting and implementing an appropriate remedy, including DEQ's remediation expectations for achieving the remediation standards and how to evaluate a range of alternatives using the balancing criteria, for the Voluntary Remediation Program (VRP).

1. What are the minimum standards for remedies under the Voluntary Remediation Program?

In accordance with § 35-11-1605 (a), all remedies under the voluntary remediation program must meet four standards:

- Protect human health, safety, and the environment.
- Remediate contaminated air, soil, and water to attain applicable cleanup levels established under Federal or State law or regulation or to attain site-specific risk-based cleanup levels developed for the site in question.
- Control any sources of releases so as to reduce or eliminate, to the extent technically practicable, further releases as required to protect human health and the environment.
- Comply with any applicable standard for management of wastes generated as a consequence of the remedy.

2. What is DEQ's overall approach to remedy selection?

In accordance with § 35-11-1606(b)(see Question #11), the Volunteer must provide a description of alternative remedial actions to be evaluated and, in accordance with § 35-11-1605(b), propose remedies that meet the minimum standards identified in question #1 above. When evaluating a remedy or combination of remedies, DEQ has identified its preferences when weighing the balancing criteria identified in question #15 below. The relative importance of these criteria may vary based on site-specific conditions. Generally, DEQ prefers remedies that:

- Rely less on containment, passive treatment (i.e. monitored natural attenuation (MNA)), and/or institutional controls to meet cleanup levels;
- Use treatment or removal to reduce the toxicity, mobility, or volume of contaminants;

05/10/12 – R2 Page 1 of 12

- Achieve cleanup levels more quickly;
- Do not present risks to workers, site neighbors, and the community during construction and implementation;
- Have greater practicable capabilities of achieving standards;
- Protect both current and reasonably anticipated future land uses;
- Rely on the simplest means available to achieve cleanup levels; and
- Do not have substantial and disproportionately high costs of implementation relative to similarly effective remedies.

3. How will DEQ evaluate whether remedies protect human health, safety, and the environment?

The requirement that remedies protect human health, safety, and the environment is an overarching standard that may require measures that are not directly related to cleanup levels, source control, or waste management but are, nonetheless, necessary for the remedy to be protective. For example, in certain situations it might be necessary for a Volunteer to provide alternative drinking water supplies in order to prevent exposure to contaminated groundwater. In general, DEQ will consider remedies to be protective of human health, safety, and the environment when implementation of the remedy results in a site that is not and does not have the potential to be immediately dangerous, acutely hazardous, or chronically hazardous to human or ecological receptors and all other remedial standards have been met.

4. How will DEQ evaluate whether remedies attain cleanup levels?

In general, DEQ will evaluate whether remedies attain cleanup levels by direct comparison of contaminant concentration (through an approved confirmation sampling program) measured at points of compliance to cleanup levels, including look-up table values, promulgated cleanup levels, or site-specific cleanup-up levels, as appropriate. DEQ has developed guidance documents on cleanup levels, points of compliance, and confirmation sampling under the VRP. (See Fact Sheet #12 Soil Cleanup Levels, Fact Sheet #13 Groundwater Cleanup Levels, Fact Sheet #10 Soil Confirmation Sampling, and Fact Sheet #22 Establishing Points of Compliance.

Note that appropriate sampling and analysis methods and approaches will be necessary, and it may be necessary to measure contaminant concentrations more than once so an adequate comparison to cleanup levels can be made. For example, it may be necessary to measure contaminant concentrations in groundwater over multiple quarters to account for any temporal fluctuation in groundwater conditions. Similarly, it may be necessary to continue measurements after a remediation system is shut down, to evaluate whether contaminant concentrations might rebound. If rebound is observed, additional remediation may be necessary.

05/10/12 – R2 Page 2 of 12

5. What is the difference between a cleanup standard and a cleanup level?

All cleanups must comply with the VRP. Cleanup standards are the narrative statutory requirements as discussed in Question #1. Cleanup levels are generally numeric; they are the concentration of a contaminant in air, soil, water, or sediment that is determined to be protective of human health and the environment under specific exposure conditions.

During remedy selection, DEQ and the Volunteer will identify specific cleanup levels, a remedial approach that is anticipated to be capable of achieving cleanup levels in a reasonable time period, and other requirements, including narrative requirements, that are necessary to comply with VRP cleanup standards.

6. How do the concepts of points of compliance and remediation time frame apply during remedy selection?

Points of compliance are the places at which air, soil, water, or other environmental media are monitored to determine if cleanup levels are achieved. Under § 35-11-1605(e), DEQ must consider a number of factors in establishing points of compliance, as follows.

When determining if final groundwater cleanup levels have been met, compliance must be monitored as close as reasonably practical to the contaminant source, site boundary, or the boundary of any use control area (UCA). Over the duration of implementing a remedy, both interim and long term points of compliance may be designated to monitor progress and to measure success, in consideration of Fact Sheet #22 Establishing Points of Compliance. DEQ will select groundwater points of compliance based on an evaluation of:

- The properties of the aguifer;
- The proximity of existing and reasonably anticipated points of groundwater withdrawal or discharge to the surface;
- The location of the contaminant relative to the site or UCA boundary;
- The toxicity of the contaminant;
- The presence and proximity of multiple contaminant sources;
- The exposure and likelihood of actual exposure to contaminated groundwater; and
- The technical practicability of groundwater remediation.

Compliance with soil cleanup levels must be sampled at locations determined by DEQ to ensure protection of human health and identified environmental receptors. Soil points of compliance must also ensure protection of surface water, groundwater, and air from contamination resulting from any potential transfer of contaminants from soil to these other media.

05/10/12 – R2 Page 3 of 12

Compliance with surface water standards must be sampled at the point where any release enters any surface water of the state, consistent with applicable federal and state requirements. If sediments are affected by releases to surface water, a sediment point of compliance may also be established.

The remediation time frame is the time period over which remedy implementation will occur. In general, DEQ will specify a date by which cleanup levels must be achieved at points of compliance. The amount of time between the beginning of remedy implementation and that date is the remediation time frame.

For more information on points of compliance, see the Fact Sheet #22 Establishing Points of Compliance.

7. What are some examples of promulgated cleanup levels established under Federal or State law or regulation?

For groundwater, promulgated cleanup levels for hazardous substances include the EPA Maximum Contaminant Levels (MCLs) and the DEQ calculated risk-based levels for chemicals for which MCLs are not available.

The MCLs are published and periodically updated by EPA. Current MCLs are published in the Code of Federal Regulations, Number 40, Part 141 (Primary Drinking Water Regulations) and Part 143 (Secondary Drinking Water Regulations). These documents are also available through the Federal EPA website at http://www.epa.gov/safewater/mcl.html.

The DEQ calculated risk-based levels for hazardous chemicals for which MCLs are not available are in the Wyoming DEQ Water Quality Rules and Regulations, Chapter 17, Appendix I. This appendix includes calculated Drinking Water Equivalent Levels (DWELs) and Acceptable Drinking Water Levels (ADWLs) for common site contaminants.

For non-hazardous substances in groundwater, the promulgated cleanup levels are found in Chapter 8 of the DEQ Water Quality Rules and Regulations. Further guidance is in Fact Sheet #13 *Groundwater Cleanup Levels*.

Currently, there are no promulgated cleanup levels for soil that apply to the VRP. To assist Volunteers in cleanup, DEQ has pre-calculated soil cleanup levels for many contaminants. These pre-calculated cleanup levels and instructions for their application to specific sites can be found in Fact Sheet #12 *Soil Cleanup Levels*.

8. How are site-specific risk-based cleanup levels calculated under the VRP?

DEQ has prepared detailed guidance on the use of risk assessment in the VRP and on calculation of site-specific risk-based cleanup levels. Volunteers should refer to this guidance, particularly Fact Sheet #11 Risk Assessment, Fact Sheet #14 Ecological Risk Assessments—Steps 1 and 2

05/10/12 – R2 Page 4 of 12

Ecological Exclusion and Scoping Assessments and Fact Sheet #20 Human Health Risk Assessment.

The VRP establishes criteria for risk-based standards for carcinogens and non-carcinogens.

For carcinogens, the statutory limits under § 35-11-1605(a)(ii)(B) for acceptable carcinogenic risk state that the lifetime excess cancer risk to any exposed individual will not exceed one-in-one million (1×10^{-6}) to one-in-ten-thousand (1×10^{-4}) . Consistent with the statute and EPA guidance, DEQ will use risk reduction to the one-in-one million level as a point of departure, or target risk level, for remedies when evaluating remedy options. Contaminated sites starting with risk that is within the 1 x 10^{-4} to 1 x 10^{-6} range are not necessarily exempt from remediation. For example, if a site was starting at 1 x 10^{-5} risk for unrestricted site use, an evaluation would be needed to determine the potential for risk reduction to 1 x 10^{-6} . It is DEQ's preference and expectation that cleanups will attain the one-in-one million risk level for all carcinogens.

However, there may be situations where DEQ, in the context of a site-specific evaluation of remedial alternatives and remedy selection, will approve remedies that do not meet the one-in-one-million excess cancer risk goal. For example, DEQ might approve a remedy that meets the one-in-one-million excess cancer risk goal for the contaminants causing the majority of risk in a given media ("risk drivers"), but does not meet the goal for a limited number of other contaminants. Similarly, in some cases, an evaluation of remedial alternatives in the context of the VRP remedy selection criteria may show that the one-in-one-million excess cancer risk goal cannot be met for any carcinogenic contaminants at a site, and, therefore, DEQ might approve a remedy that does not meet the one-in-one million excess cancer risk goal. Of course, under no circumstance will DEQ accept remedies that do not reduce carcinogenic risk to below the one-in-ten-thousand (1 x 10⁻⁴) level.

For contaminants that are systemic toxins, § 35-11-1605(a)(ii)(B) establishes that site-specific risk-based cleanup levels must be established at concentrations that result in a hazard index of one (1) or less. The hazard index is a measure of the non-carcinogenic risks posed by hazardous substances.

When establishing risk-based cleanup levels for soil in the absence of a UCA, DEQ generally will use residential (unrestricted use) exposure assumptions to a depth of 12 feet. Since residential use assumptions typically reflect the most potential exposure at a site, the residential exposure scenario generally represents the greatest potential risk under unrestricted land use conditions. In addition to considering direct human exposure, DEQ will establish cleanup levels for soil that protect surface water, groundwater, and air from any potential transfer of contaminants from soil to these media. In general, soil levels to protect groundwater will be established in consideration of a contaminant dilution and attenuation factor (DAF) equal to one (1) unless a site-specific approach is used. For more information on site-specific approaches to calculating soil cleanup levels to protect groundwater, see Fact Sheet #12 Soil Cleanup Levels.

When establishing risk-based cleanup levels for hazardous substances in groundwater, DEQ is required by statute to assume that groundwater may be used as a drinking water source. When

05/10/12 – R2 Page 5 of 12

establishing risk-based cleanup levels for non-hazardous substances in groundwater, DEQ will consider the groundwater class of use and the naturally-occurring groundwater concentration for the non-hazardous substance. (For additional information see § 35-11-1605(a)(ii)(B), Fact Sheet #13 *Groundwater Cleanup Levels*, Chapter 8 and Chapter 17, Appendix I of Water Quality Rules and Regulations.)

When establishing site-specific, risk-based cleanup levels for ecological receptors, DEQ will establish levels that adequately reduce risk of significant adverse impacts to ecological receptors for which habitats have been identified on or near the site.

9. How will DEQ evaluate whether remedies control sources of contamination?

§ 35-11-1605(a)(iii) requires that sources must be controlled "so as to reduce or eliminate, to the extent technically practicable, further releases as required to protect human health and the environment." A key objective of all VRP remedies is to stop further environmental degradation by controlling or eliminating sources--both sources of direct exposures to humans and environmental receptors and more indirect sources, such as contaminated subsurface soils and/or non-aqueous phase liquids (NAPL) acting as an ongoing source of groundwater contamination. A remedy shall be considered to control sources if it results in control of releases of contaminants above cleanup levels. DEQ will consider source control strategies that rely on treatment, removal of contamination, and containment, with a preference for remedial approaches that rely on treatment or removal. For more information on source control strategies, please refer to the attachment to Fact Sheet #22 Establishing Points of Compliance.

At sites where a determination of technical impracticability has been made (see § 35-11-1605(d)), institutional controls are likely to be required to protect people from contamination over the long term, and the site may, but is not required to be, designated as a UCA. Except in the case when a determination of technical impracticability has been made, an approved UCA must be in place before DEQ can enter into a remedy agreement that includes reliance on long-term site use restrictions. To create a UCA, the Volunteer must petition the appropriate governmental entity or entities (see § 35-11-1609). For more information, refer to Fact Sheet #23 *Institutional Controls, Engineering Controls, and Use Control Areas*.

10. How will DEQ evaluate whether remedies comply with waste management standards?

DEQ will evaluate whether remedies comply with waste management standards by comparing proposed remedial approaches to applicable requirements. DEQ has a number of permitting programs that generally apply to common remediation activities. For example, the Solid Waste Rules and Regulations require permitting before you treat, store, or dispose of a solid or hazardous waste and require compliance with other requirements for solid or hazardous waste accumulation.

DEQ has not attempted to list all potential authorizations and/or permits that might apply to remediation in this Fact Sheet. Whether your site is in the VRP or not, you are responsible for

05/10/12 – R2 Page 6 of 12

determining the programs that may apply to your activities and for obtaining permits or other necessary authorizations. Volunteers are strongly encouraged to contact the appropriate local, State, and Federal agencies, including DEQ, to determine if planned activities are regulated. At certain sites, DEQ may request that Volunteers develop a waste management plan as part of evaluating remedial technologies, since the availability and ease of waste management capacity may influence remedy selection.

11. When is an evaluation of remedial alternatives needed?

DEQ expects that informal evaluations of remedial alternatives will be needed for every VRP site. These informal evaluations are necessary for Volunteers to be confident that the remedy they propose will comply with the remedial standards, will be appropriate in consideration of the remedy balancing criteria, and, therefore, will likely be approved by DEQ.

In addition, under § 35-11-1606(b), DEQ may require a formal evaluation of remedial alternatives in certain circumstances. Formal evaluations are written evaluations that may include certain additional components, such as field testing, and must be approved by DEQ. In general, formal evaluations of remedial alternatives will be needed for any site that is determined by DEQ to have the potential for significant contamination or to be located in an area where human exposure to contaminants is likely.

DEQ will also require a formal evaluation of remedial alternatives as a condition for the State to maintain primacy in any federal program. However, even in these circumstances, not all potential remedies must be evaluated for a site. Consistent with DEQ's overall approach to remedy selection, focus on evaluations of remedial alternatives should begin early to foster efficient identification of an appropriate remedy considering site-specific conditions.

Unless the DEQ agrees in advance that a passive remedy (e.g., MNA) is the only remedial alternative that needs to be evaluated, if a passive remedy is proposed, then the Volunteer should compare it to at least one active remedy (i.e., remedies that use treatment or removal to reduce the toxicity, mobility, or volume of contaminants).

It should be noted that a site owner or operator who participates in the VRP, but is also subject to hazardous waste permitting or corrective action requirements, must comply with all requirements of the hazardous waste Rules and Regulations promulgated under § 35-11-503(d).

12. Under what circumstances are alternative cleanup levels allowed?

Alternative cleanup levels are allowed only under two circumstances.

First, in accordance with § 35-11-1605(c) and § 35-11-1609, site-specific, risk-based cleanup levels for soils may be calculated using restricted use (e.g., non-residential) exposure assumptions where a UCA has been established by the local government and DEQ agrees to the establishment of alternate levels based on non-residential exposure assumptions. Except for cases where the

05/10/12 – R2 Page 7 of 12

Volunteer has demonstrated technical impracticability, before agreeing to establishment of cleanup levels based on non-residential exposure assumptions (which requires a UCA), DEQ expects Volunteers to evaluate remedies that would meet cleanup levels for unrestricted site uses. DEQ is not required to approve cleanup levels based on non-residential exposure assumptions, even when a UCA is in place.

Second, in accordance with § 35-11-1605(d), alternative cleanup levels for soil or groundwater may be established if, after evaluation of currently available technology(ies), DEQ determines that it is technically impracticable to meet the primary cleanup levels. Alternative cleanup levels may be established only if the site owner has or obtains rights to control human or environmental exposures to contaminated media and consents to impose such controls as are required to protect human health and the environment. Designation as a UCA is not required for a site where a determination of technical impracticability has been made. DEQ plans to develop additional guidance on technical impracticability decisions.

13. What if background concentrations of a contaminant are higher than cleanup levels?

Volunteers are not required to cleanup sites to concentrations below background levels. Please refer to Fact Sheet #24 Establishing Site-Specific Background Metals Concentrations in Soil for more information.

14. Are remedies that rely on monitored natural attenuation allowed?

Yes. DEQ can consider remedies that rely on MNA, just as DEQ can consider remedies that rely on any other remediation technology. Under § 35-11-16-5(b)(iii), MNA remedies may be considered whether or not DEQ has made a technical impracticability determination and regardless of whether a UCA is in place. In general, DEQ will consider MNA effective if there is evidence that natural attenuation is occurring and will be completed within a reasonable time period.

Unless the DEQ agrees in advance that MNA is the only remedial alternative that needs to be evaluated, if a passive remedy is proposed (e.g., MNA), then the Volunteer should compare it to at least one active remedy (i.e., remedies that use treatment or removal to reduce the toxicity, mobility, or volume of contaminants).

For additional guidance on MNA remedies, see Fact Sheet #26 *Monitored Natural Attenuation for Soil and Groundwater*.

15. How will DEQ choose between remedies that meet the remedial standards?

DEQ will select between remedies that meet the remedial standards by using the balancing criteria established in § 35-11-1605(b). These are:

05/10/12 – R2 Page 8 of 12

- The extent to which the remedy will be reliable and effective for the long term. For remedies that include engineering or institutional controls, in accord with a UCA designation, DEQ will consider the expected life cycle performance of any engineering controls, monitoring systems, and institutional controls. DEQ prefers remedies that rely less on containment, monitored natural attenuation, and/or institutional controls to meet cleanup levels. Such remedies often require longer operation and create maintenance burdens.
- To the extent that the remedy results in a reduction of toxicity, mobility, or volume of contaminants, DEQ will consider the degree to which remedies incorporate treatment or removal of contaminants to lower long term risks to human health and the environment. DEQ prefers remedies that use treatment or removal to reduce the toxicity, mobility, or volume of contaminants.
- The short term effectiveness of the remedy. DEQ will consider the time required for each remedy to attain cleanup levels for air, soil, and water and the time required for a remedy to become operational and to begin to substantially reduce contaminant concentrations and site risks. DEQ prefers remedies that achieve cleanup levels more quickly and that result in rapid reductions in contaminant concentrations during the early phases of remedy implementation.
- Impacts that may be caused by implementation of the remedy. The DEQ will consider any adverse impacts that may be caused by a remedy, the gravity of any projected impact, and the cost and availability of measures to mitigate the impact. In evaluating this criterion, DEQ will consider risks to workers and the community posed by the remedy during construction and implementation, including the length, extent, and significance of the risks, availability of measures to reduce risks, and the cost of risk mitigation. Other adverse impacts of remedy implementation will also be considered, such as short and long term disruptions to land use, traffic disruptions, visual, noise, and odor impacts, disruptions to ecological receptors or impacts to habitat and overall impacts to the environment from emissions and the consumption of nonrenewable resources. In general, the DEQ prefers remedies that minimize long-term disruptions in land use, and do not present significant or unnecessary risks to workers, site neighbors, and the community during construction and implementation. Please refer to the VRP's Green and Sustainable Remediation (GSR) policy and guidance documents located on the VRP website at http://deq.state.wy.us/volremedi/factsheets.asp for more information on how to consider GSR during the remedy selection and implementation process.
- The extent and nature of contamination and practicable capabilities of remedial technologies and whether achieving standards is technically impracticable. Consideration of these criteria necessitates an evaluation of a remedy's capability to attain cleanup levels. This may include an evaluation of demonstrated capabilities at other sites. In general, remedies that make use of demonstrated technologies will be more practical; however, the practical capabilities of innovative technologies will also be considered. Consideration should also be given to whether remedy effectiveness is affected by the nature and extent of contamination. In some cases, the nature of contamination and site conditions, such as hydrology, may limit the effectiveness of certain remedial approaches. DEQ favors remedies with greater practicable capabilities, considering the nature and extent of contamination. At sites with widespread contamination, certain remedies may be appropriate for portions of the site, such as "hot spots" or source areas of contamination, but may not be practicable for the whole site.

05/10/12 – R2 Page 9 of 12

- Reasonably anticipated future land uses or use restrictions in a UCA designation. In general, DEQ prefers remedies that are protective for both current and reasonably anticipated future land uses. UCAs affect only soil cleanup. If a UCA has been designated, remedies for soil should be evaluated relative to the use restrictions contained in the UCA; however, DEQ is not required to approve alternate soil cleanup levels even where a UCA is present.
- Consistency of remedies with the nature and complexities of releases of contaminants. Remedies should be consistent with the contaminants and physical/chemical characteristics of contaminants present at a site, including consideration of mobile, residual, dissolved, and vapor contaminant phases. Remedies should also be consistent with the complexity of the site in question, including the type and number of releases, locations, and sources; release migration and transport; hydrogeologic setting; and other appropriate factors. DEQ favors remedies that rely on the simplest, most straightforward means available to achieve cleanup levels.
- Cost of the remedy. DEQ will consider whether a remedy presents a substantial and disproportionately high cost for implementation and completion. In making this evaluation, DEQ will compare the costs of remedies considering the degree of risk reduction that is afforded by each remedy. Costs to be considered include capital, operation and maintenance, engineering and institutional controls, and monitoring costs (including performance monitoring) for the anticipated life of the remedy. Factors to evaluate may include site-specific conditions, the total net present value of a remedy, how much of the total cost of a remedy is incurred in the short versus the long term, the amount of uncertainty associated with cost estimates, and the costs of contingencies in the event a remedy is not effective. DEQ favors remedies that do not have substantial and disproportionately high cost of implementation relative to similarly effective remedies.

16. What is the administrative process for remedy selection?

Remedy selection is formalized in a remedy agreement. A remedy agreement is an agreement between DEQ and a Volunteer that establishes the specific remedial actions that will be implemented at a site. A remedy agreement typically contains a remedial action plan, a description of any engineering or institutional controls that are associated with the remedy, a schedule, provisions for modifying (reopening) or terminating the agreement, and other provisions necessary to support efficient and effective implementation of the remedy. Under § 35-11-1607(c), the remedy and remediation standards for a site that are set forth in a remedy agreement are permanent, subject only to the reopeners and termination clauses in § 35-11-1610. Under § 35-11-1610, a remedy may be reopened only where:

- The site owner fails substantially to comply with the terms and conditions of the remedy agreement;
- Contamination is discovered that was present on the site but was not known to the owner or DEQ on the date the remedy agreement was issued;
- An imminent and substantial endangerment to human health or the environment is discovered.
- DEQ determines that the site remedy has failed to meet remediation objectives; or

05/10/12 – R2 Page 10 of 12

 DEQ determines that the remedy agreement was based on fraud, material misrepresentation, or failure to disclose material information.

Of course, a remedy agreement does not limit the DEQ's ability to undertake enforcement actions related to complaints under Article 7 of the Environmental Quality Act (EQA) (see § 35-11-701, et. seq.), or to impose penalties for violations of the EQA under Article 9 (see § 35-11-901 et. seq.). Finally, remedy agreements do not relieve the Volunteers from applicable environmental permitting requirements, such as permitting requirements for hazardous waste management facilities under RCRA Subtitle C.

Before entering a remedy agreement, Volunteers must comply with the public participation requirements of the VRP. Prior to entering into a remedy agreement, the Volunteer must give notice of the proposed remedy to all surface owners on record of land adjacent to the site and publish notice once per week for four (4) consecutive weeks in a newspaper of general circulation in the county in which the site is located. For additional information about the public participation requirements, please see the Fact Sheet #2 *Public Participation*.

17. What happens once the Volunteer and DEQ enter into a remedy agreement?

Once the DEQ and the Volunteer enter into a remedy agreement, the Volunteer begins remedy implementation in accordance with the terms and conditions in the agreement. Remedy implementation will include construction and start-up of the remedy, monitoring of remediation progress, and remedy progress reports to DEQ, and, at the end of the remediation time frame, sampling and analysis to confirm that cleanup levels are achieved at points of compliance. These activities are specified in the remedy agreement. In situations where complex remedies are chosen, remedy implementation may include separately phased remedy design and construction evaluations and work plans.

DEQ will require a suitable bond or other evidence of financial assurance to assure the performance and maintenance of engineering controls and any monitoring activities required in a remedy agreement (see § 35-11-1607(b)(i)).

One of the features of the VRP is the liability assurances available to volunteers. When a remedy agreement is in place and a Volunteer is in compliance with the agreement, DEQ can issue a covenant not to sue. A covenant not to sue is a liability assurance that states that DEQ will not issue a unilateral cleanup order as long as a Volunteer is implementing a remedy consistent with the terms of a valid remedy agreement. For more information about the covenant not to sue and other liability assurances available to VRP Volunteers see Fact Sheet #15 Liability Assurances.

18. How can I get more information about the VRP?

To learn about VRP sites that may exist in your community, obtain copies of other VRP Fact Sheets/guidance documents, get answers to your questions, or volunteer for the program, contact DEQ at (307) 777-7752 or through the VRP website at: http://deq.state.wy.us/volremedi/index.asp.

05/10/12 – R2 Page 11 of 12

The VRP website includes all of the Fact Sheets and other guidance documents for the VRP. This website is updated frequently and includes the latest information about DEQ's progress in developing guidance, policy, and other supporting documents for the VRP.

05/10/12 – R2 Page 12 of 12